



# CITY OF NEWPORT BEACH

## BUILDING DEPARTMENT

3300 NEWPORT BLVD.  
P.O.BOX 1768, NEWPORT BEACH, CA  
(949) 644-3275

### RESIDENTIAL PLAN CHECK COMMENTS

Project Description: NEW SINGLE FAMILY DWELLING WITH ATTACHED GARAGE, in liquefaction zone and flood zone AE-9'

Project Address: 1001 N. BAY FRONT

Plan Check No.: 1188-2010

Date Filed: 06/30/10

No. Stories: 2

Use: SFD/GAR

Occupancy: R3/U

Const. Type: VB

Architect/Engineer: SCOTT LAIDLAW

Phone: 949-645-9982

Owner: JACK CANCELLIERI

Phone: 949-723-0147

Submitted Valuation: \$600,00

Checked by: S. KUSIK

Phone: 949-644-3285

Permit Valuation:

☐ 1<sup>st</sup> Check 07/16/10

☒ 2<sup>nd</sup> Check 09/14/10  
*Italic comments*

☐ 3<sup>rd</sup> Check

☐ 4<sup>th</sup> Check\*

**\*NOTE: Do not resubmit after the 3<sup>rd</sup> plan check. Call the plan check engineer for an in-person recheck appointment.**

**WARNING: PLAN CHECK EXPIRES 180 DAYS AFTER SUBMITTAL.**

**THIS PLAN CHECK EXPIRES ON: 12/27/2010**

**Approval of plans and specifications does not permit violation of any section of the Building Code or other City ordinances or State law.**

**This plan check is according to: 2007 CBC, 2007 CPC, 2007 CEC, 2008 T-24 Energy**

- Make all corrections listed below
- Resubmit originally checked plans and indicate the location of response on this sheet. **DO NOT** resubmit after the third check. Call plan check engineer and schedule in-person recheck.
- Return this sheet with corrected plans
- For checking status of plans: call **(949) 644-3288** during business hours, or may be verified 24 hours 7 days a week via the Internet at:  
[www.newportbeachca.gov/building/](http://www.newportbeachca.gov/building/) or interactive voice response at **(949) 644-3255**
- For clarifications on corrections, you may call the Plan Check Engineer or schedule an appointment.
- When new information is provided after plan check due to corrections or otherwise, additional plan review time may be necessary upon resubmittal. Review of new information may result in additional corrections.

**Advisement:** South Coast AQMD Rule 445 does not allow wood burning fire place to be installed in projects for which a building permit is issued on or after March 9, 2009. Additional information is available on AQMD web site at <http://www.aqmd.gov/rules/reg04/r445.pdf>

## **GENERAL**

1. APPROVAL IS REQUIRED FROM:
  - a. Planning Department
  - b. ~~Public Works Department~~
2. ~~Show complete and correct legal description on plans.~~
3. ~~Provide pedestrian protection adjacent to public way as follows:~~

<b>TABLE 3306.1 PROTECTION OF PEDESTRIANS</b>		
<b>HEIGHT OF CONSTRUCTION</b>	<b>DISTANCE FROM CONSTRUCTION TO LOT LINE</b>	<b>TYPE OF PROTECTION REQUIRED</b>
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than one-fourth the height of construction	Barrier and covered walkway
	5 feet or more, but between one-fourth and one-half the height of construction	Barrier
	5 feet or more, but exceeding one-half the height of construction	None

~~When required, fence barrier and walkway cover to be constructed per CBC 3306.5, 3306.6 and 3306.7.~~

4. ~~Provide construction fencing for new construction. Fence height to be between 72" and 84" high.~~
5. Final architectural drawings to be stamped, wet-signed and dated by the design architect. Signature stamps, photocopied or electronic signatures are not sufficient. (This correction will be revisited at plan approval.)
6. T-24 shall have the original wet-signatures of the document author and project designer. Signature stamps, photocopied or electronic signatures are not sufficient. (This correction will be revisited at plan approval.)
7. Final structural drawings and calculations to be stamped, wet-signed and dated with signing date by the design engineer. Signature stamp, photocopied or electronic signatures are not sufficient. (This correction will be revisited at plan approval.)
8. ~~Revise the project data as follows:~~
  - a. ~~Include 'U' occupancy for garage;~~
  - b. ~~Omit "existing" throughout.~~
9. ~~Provide completed contact information for all project consultants on the cover sheet, include surveyor, grading engineer, soils engineer and T-24 designer.~~
10. Define the garden wall height on the site and grading/drainage plans. A separate permits, plan review and approval shall be obtained for concrete or masonry walls greater than 36" above grade and retaining walls greater than 48" from bottom of footing to the top of the wall.  
*Provide a completed permit application for the garden walls, est. height >4-0 ft. Define the actual maximum height and total wall length of the proposed walls on the permit description of work. (A.101)*
11. ~~Revise the list of deferred submittals on the cover sheet. All electrical, mechanical and plumbing drawings shall be provided as a part of the current plan review. Omit these from the list of deferred submittal.~~
12. Provide a list of special inspections specific to the project on the first sheet of the plans, regardless of listing elsewhere. Alternately, provide a note on the cover sheet stating where the special inspection requirements are listed in the plans. 1704.1.1, NBMC 15.04.350 and 15.04.360 (A.001)  
*Special inspections are required for three items on the structural plans, and so noted on the engineer's response. Provide the list as noted above on the cover sheet. (A.001 & S100)*
13. ~~Provide clear and legible dimensions and callouts throughout the plans. i.e. dimension at powder room WC. (A.200)~~
14. ~~Omit details and notes which are not part of the scope of work. i.e. 9/A.700~~
15. ~~Include the roof and deck gutter projections on the site and roof plans. Maintain 2ft clear to the property line beyond all projections. (A.100 & A.202) (duplicate item, see #61 for resolution)~~
16. ~~Provide an architectural construction section for the concrete stairs on grade at the entry. Detail shall coordinate with the structural plans (7/S300) See also item #45 below.~~

17. Include the complete Simpson Steel StrongWall plans sheets as part of the plan set. Include the added sheets on the sheet index.

*The Steel StrongWall details as provided are not complete. Detail 4/S403 references sheet SSW1 of the Simpson plan sheets. Include all details and/or the complete SSW sheets as a part of the plans.*

**ENERGY EFFICIENCY (2008 BUILDING ENERGY EFFICIENCY STANDARDS (BEES))**

18. Provide an itemized list of all fenestrations in calculations, including the door glazing throughout the dwelling. Revise the fenestration type as needed to account for proposed door glazing. T-24

*The door glazing U-values on the plans do not agree with the T-24 energy analysis. The values stated on the plans are less efficient (higher U-factor) than the values used in the design.*

*Revise the door schedule and/or rerun the T-24 energy analysis to coordinate the required glazing efficiency for the doors. (A.002 & T-24.1)*

19. Revise the U-factors ~~and provide the SHGC values~~ for all fenestrations on window and door schedules. The values listed shall equal or provide better efficiency than those used for the energy design. (A.002 & T-24.1)

*See item 18 above for additional clarification*

20. Add note to the window and door schedules, "Fenestrations must have temporary and permanent labels." (A.002)

~~21. Window B1 shall be tempered adjacent to door 105B. (A.002 & A.200)~~

~~22. All permanently installed high efficiency luminaires shall be switched separately from low efficiency luminaires.~~

~~23. Lighting integral with exhaust fans, in rooms other than kitchens, is to comply with lighting efficiency requirements per mandatory features list.~~

~~24. All exhaust fans shall be switched separately from lighting systems unless fan has integral lighting system with manual on/off switch which allows fan to operate independently of integral lighting system. SX1 & FX2 shall be separately switched.~~

~~25. Provide accurate exhaust fan notation on the electric plans. EF on plans, EQ2 on schedules (A.500 & A.501)~~

26. Provide total fixture wattage calculations on the plans for each kitchen to demonstrate compliance with the maximum wattage requirements. A minimum of 50% of kitchen lighting wattage is to be high efficiency and switched separately from any non high efficiency lighting. An additional 50 watts of low efficiency lighting for dwelling units  $\leq$  2500 sq.ft., and 100 watts for dwelling units  $>$  2500 sq.ft., may be installed when:

*The Kitchen and Back Kitchen/Pantry lighting shall be separately analyzed. Two Kitchen areas are created by the partition wall, and additional appliances. Provide two sets of wattage calculations; include all fixture types. The N1 and the unlabeled fixtures outside the Pantry doors did not appear as part of the analysis. Fixtures behind the pantry doors do not count toward compliance wattage.*

~~27. All low efficiency luminaires in kitchen are controlled by manual-on-vacancy sensor, dimmer, energy management control systems (EMCS), or multi-scene programmable control system; and~~

28. Revise the light fixture switching throughout the plans. All permanently installed luminaires in bathrooms, garages, laundry rooms, closets and utility rooms shall be high efficiency or controlled by manual-on vacancy sensor. Dimmers are not equal to vacancy sensors. (A.500 & A.501)

*Vacancy Sensors are not identical to the former occupancy sensors, revise the plans to comply with the current Energy Code.*

29. Revise the switches on the exterior lighting throughout the plans, occupancy sensors are not equivalent to photocontrol timers. Exterior lighting mounted on building to be high efficiency. Low efficiency lighting may be provided if controlled by manual-on/off switch, motion sensor without override or bypass switch that disables motion sensor and:

- a. photocontrol not having an override or bypass switch that disables photocontrol, or
- b. astronomical time clock not having override or bypass switch that disables astronomical clock, or
- c. energy management control system (EMCS) not having override or bypass switch that allows luminaires to be always on.

*Revise the SX1 exterior fixture at the fireplace. Provide a high efficacy fixture or motion sensor/timer as noted above.*

~~30. Implement lighting efficiency requirements on electrical drawings per mandatory features list.~~

31. ~~Provide complete lighting plans for the exterior stairs and the roof deck.~~
32. Provide whole-building mechanical ventilation system, natural ventilation through doors and windows is not an acceptable alternative to whole-building ventilation. Include ventilation system design calculations on plans to show compliance. For continuous whole-building ventilation, minimum required rate of ventilation is 1 cfm for each 100 sf. of conditioned floor area plus 7.5 cfm for each occupant (1 occupant per bedroom + 1). Ventilation to be provided by exhaust air, supply air or combined exhaust and supply air. CES 152(a), Exception 5 (ASHRAE Std. 62.2-2007 Section 4)
- Identify the house fan location and required cfm capacity on the plans.*
33. Provide in kitchens local exhaust system vented to outdoors with rate = 100 cfm as a part of whole-building ventilation requirement.
- Note not found, as stated in responses. Specifically identify the kitchen exhaust hood location and minimum cfm required for compliance. (A.200, A.500 & A.500b)*

### **FLOOD HAZARD ZONE**

34. ~~Revise interior sunken floor area, between kitchen and garage, including the laundry area. All interior living areas shall have top of slab elevation at or above elevation: 9.0 MSL (NAVD 88). Building site is located in a special flood hazard zone AE 9'. NGVD = NAVD - 2.4'. NBMC 15.50.070 & 15.50.200~~
35. Revise the garage foundation details to provide concrete curbs at or above 9.0 MSL. Stem height should be at least 1.55' above the currently proposed garage finish floor elevation of 7.45'.
- Provide cross references to the footing and raised stemwall details on the Section plans. Revise the section elevation to clearly show the exterior stair stemwall height. (3/A.401)*
- Provide revised details for all foundation conditions surrounding the garage, sunken entry and west stair to Deck 213. Concrete curbs shall be provided around the entire area with top of wall/curb at or above the 9.0 MSL height, similar to 12/S300.*
36. ~~Provide two openings in garage walls. Bottom of opening to be within 1 ft. from adjacent grade. Total area of openings to be 1/144 area of garage. Opening may be covered by louvers or mesh which permits entry and exit of flood water. NBMC 15.50.200C1d~~
37. ~~Identify the installation height for all mechanical and electrical fixtures and outlets in the garage to be above the Base Flood Elevation (BFE) of 8.67 MSL (NAVD 88).~~
38. ~~Provide the following note on the first sheet of the plans and site plan:~~
- ~~"A licensed surveyor shall complete FEMA elevation certificate and submit it to Building Department Inspector during final inspection."~~

### **EXTERIOR WALLS**

39. ~~Revise the one-hour house wall detail and floor plans to coordinate the 2x6 stud wall framing required by detail 7/A.002. Exterior walls of dwellings, guesthouses, garages, carports and/or accessory structures closer than 5 ft. to the property line shall be 1-hour fire-resistance-rated construction. CBC Table 602~~
40. ~~Call out the required 1-hour walls along the east property line on the site plan, each floor plan and building sections.~~
41. ~~Revise detail 7/A.700 to provide a one-hour construction detail through the parapet. Thinset stone veneer is not equal to 7/8" stucco.~~

### **MEANS OF EGRESS**

42. ~~Dimension the entry door leaf from the hinge point to the latch edge of the door. The door leaf shall not exceed 4'0" wide. 1008.1.4~~
43. ~~The entry door in the full open position shall not reduce the adjacent stair required width or landing. Dimension the stair and landing beyond the door in the full open position. 1009.1 & 1009.4. (A.200)~~
44. ~~The stairs to the second floor guest room and roof deck shall be a minimum 5' away from the property line. Exterior stairways with one open side serving as an element of a required means of egress are not permitted closer than 5 ft. to the property line. CBC 1024.3; Table 704.8~~
45. Revise the structural stair details and provide architectural stair details such that the rise and run are dimensioned from the finish surfaces. Provide section and details of interior and exterior stairway showing:
- Provide a nosing between 0.75" and 1.25" on stairways with solid risers where tread depth is less than 11". (16/A.700 & 20/A.700)

*Fully dimension the architectural detail provided. Include the rise, run and maximum tread overhang. Show the property on the details. (2/A.401)*

- ~~b. Minimum headroom of 6 ft. 8 inches. CBC 1009.2~~
  - ~~c. Enclosed usable space under a stairway requires 0.5 inches gypsum board finish. CBC 1009.5.3~~
  - ~~d. Provide a note on the plans, "All stairways shall have an illumination level on tread runs of not less than 1 foot candle (11 lux)." CBC 1205.4~~
46. Revise the split landings to comply with winder tread dimensions. Split landings are not permitted. Winder treads shall have a minimum tread depth of 10 inches at a point 12 inches from the narrow side, and a minimum tread depth of 6 inches at the narrow edge. CBC 1009.3.1 & 1009.4  
*Not found 09/14/10. Provide complete dimensioned details for the split landings at the interior stair and roof stair that demonstrate compliance with the above requirements. Specifically the 6" minimum tread width at the narrow edge is not evident on the floor and roof plans.*
47. Fully dimension the stair landings for the roof/deck access stair. 1009.4  
*See item 46 above.*
48. Provide a handrail at the exterior garden stair, regardless of the number of risers. 1009.10  
*Not found 09/14/10. The exception cited is applicable to interior stairs only. The stair in question is not "within" a single family dwelling.*
- ~~49. Provide a handrail at the exterior entry stair such that the rail is perpendicular to the required 36" wide stair width. The rail as shown on the site plan and elevations does not provide compliance. 1009.10, (A.100)~~
50. Handrails shall satisfy the following:
- a. Provide a minimum of one continuous handrail on stairways with 4 or more risers and at all open sides. CBC 1009.10
  - b. Handrail height shall be 34 to 38 inches above the nosing of treads. CBC 1012.2
  - c. Openings between intermediate balusters on the open side of stairs shall preclude the passage of a 4-3/8 inches diameter sphere.
  - d. The triangular openings formed by the riser, tread and bottom rail shall preclude the passage of a 6 inch diameter sphere. CBC 1013.3 EX 1 and 5
  - e. Handrail with circular cross-sections shall have a diameter of 1.25 to 2 inches.
  - f. Handrails with other than circular cross-sections shall have a perimeter dimension of 4 to 6.25 inches with a maximum cross-section of 2.25 inches. CBC 1012.3
  - g. Clear space between handrail and wall shall be 1.5 inches minimum. CBC 1012.6
- Amend and/or provide fully dimensioned details throughout the plans to demonstrate compliance.*
51. Provide a guard at Hall 200 adjacent to the stair. (A.201, 2/A.401 & 1/A.401)  
*Dimension the guard height at the second floor hall on the building section. (1/A.401)*
- ~~52. Fully dimension the guards at the second floor deck, roof deck and all stair landings. (1/A.400, 3/A.401, A.300, A.301 & A.201)~~
53. Guards shall meet the following:
- a. Provide guards where the open side is more than 30 inches above the floor or grade below. CBC 1013.1
  - b. Guard height shall be a minimum of 42 inches. CBC 1013.2
  - c. Openings between intermediate balusters shall preclude the passage of a 4 inch diameter sphere. CBC 1013.3
- Provide 42" guard/wall around the entire roof deck and roof stair, including those areas adjacent to skylights, mechanical decks and other roof areas. The guard height shall be measured from the finish surface of the roof deck, walkway, landing or stair.*
- Dimension the wall heights on the building sections. Identify the top of wall elevations on the roof plan and building elevations. (A.202, A.300, A.301, 1/A.400 & 1/A.401)*
- CONSTRUCTION**
- ~~54. Revise the keynotes on the site plan and other plan sheets, such that only those relevant to the proposed scope of work are presented. i.e. Keynotes #28, 38, 39, 40 on A.100~~
- ~~55. Show street address on building elevation per NBMC 13.12.210.~~
- ~~56. Define the pantry doors on the door schedule. (A.002)~~
- ~~57. Clarify the use of the area in the garage behind the sliding door. (A.200)~~
- ~~58. Include the sliding door in the garage on the door schedule. (A.002)~~

59. Clarify the raised roof areas over the master bedroom, between section lines 2/A.400 & 2/A.401, and shown on the west elevation. (1/A.301)  
*Provide construction details and roofing Class information for the "quiet enclosure" over the mechanical units on the roof. (A.202, A.300 & A.301)*
60. Define the wall height between the mechanical FAU area at the roof and the roof/deck walk area.  
*Not found 09/14/10. See item 53 above.*
61. Show the roof and deck gutters on the roof and site plans. The gutters shall not further reduce the 2'0" clear to the property lines. (A.100 & A.202)  
*Not found 09/14/10.*
62. ~~Correct the room labels on the 2<sup>nd</sup> floor lighting plan. Deck 213 point to the guest room. (A.501)~~
63. ~~Dimension on the plans the 30 inches clear width for water closets and 24 inches clearance in front of water closet for bathroom. CPC 407.6~~
64. ~~Define the roof/deck and open stair finishes. Class 'A' roofing assembly shall be provided. Wood roofing is not permitted for new construction, including the prohibition of wood finishes over Class 'A' roofing materials. NBMC 15.04.290~~
65. ~~Show the electric meter on the building elevations. (1/A.301) See also item #90.~~
66. ~~Clarify the opening shown on the east elevation under the stairs. (1/A.301)~~
67. ~~Detail and dimension the stucco screed at the roof/deck and other areas, such that the screed is 2" minimum above the solid surface. (1/A.700)~~
68. ~~Provide a wall to deck construction detail for each condition surrounding the roof/deck.~~
69. ~~Provide separation between the stone veneer finish and the adjacent finish surface or grade, of 2" above hardscape and 4" above earth. Alternately, obtain an alternate methods and materials approval for zero clearance as detailed. Detail shall include provided moisture system, similar to stucco screed separations. (5/A.700)~~
70. ~~Clarify the skylight callouts and references throughout the plans. Omit the Bristol Lit ESR#2469 references, Legacy reports are not valid for 2007 CBC. Specify skylights that have current testing compliance with NFRC. (16/A.701 & 17/A.701)~~
71. ~~Provide accurate testing approval references throughout the plans for each product utilized. i.e. Dex-o-Tex listed as ICBO on 8/A.701, should be ICC ESR-1757~~
72. ~~Provide additional details for the separation between the exterior stone pavers, adjacent to the first floor walls, and the stucco screed such that the 2 or 4 inch required separation is provided above the subsurface.~~
73. ~~Define the finish slope percent for the 2<sup>nd</sup> floor deck finish. (5/A.702)~~
74. ~~The following construction components/materials are not included in the California Building Code. Specify the listing/labeling agency and listing number for:~~
- ~~a. roof/deck finish~~
  - ~~b. epoxy~~
  - ~~c. waterproofing system at planter boxes (10/A.700)~~
  - ~~d. skylights~~

The following agencies' listings are accepted by the City of Newport Beach for the following products:

<u>Agency</u>	<u>Products</u>
IAPMO	Plumbing products
ICC-ES	Building construction products including fireplaces & skylights
Intertek, UL	Manufactured fireplaces
UL	Electrical components
NFRC	Skylights and fenestrations

~~Alternate: Apply for Alternate Materials or Method of Construction for products/material not in the California Building Code or listed by accepted agencies above. An application is available on the web at: <http://www.newportbeachca.gov/Modules/ShowDocument.aspx?documentid=6803>~~

75. ~~Dimension the ceiling heights in all areas on the ceiling plan or building sections. Occupiable spaces, habitable spaces, and corridors shall have a ceiling height of no less than 7 ft. 6 inches. Bathrooms, toilet rooms, kitchens, storage rooms, and laundry rooms shall have a ceiling height of no less than 7 ft. 1208.2 (A.400 & A.401)~~

76. Provide smoke detectors in each hallway leading to sleeping rooms in each sleeping room of new or existing construction, on top of stairway, and at each story. In new construction detectors to be hard wired with battery back up. CBC 907.2.10.1.2
77. Detectors shall be interconnected to sound at the same time.
78. Detectors are not to be located in kitchen, garage, or within 3 feet from door to kitchen or bathroom or supply air registers.

#### **VENEER / FIREPLACE**

79. Specify and detail the veneer material, thickness, backing, anchorage, footings and support over openings. 1405 (6/A.700 & 7/A.700)  
*Thickness shall be stated on the plans.*
80. For each fireplace/chimney specify the following:
- a. Chimney shall extend at least 2 ft. higher than any portion of the building within 10 ft., but shall not be less than 3 ft. above the highest point where the chimney passes through the roof. 2113.9
  - b. Provide a spark arrestor to meet all the requirements of Section 2113.9.1
  - c. Provide 2 inch clearance to framing around fire box and chimney or thickness from lining to combustibles to be 12 inches. 2113.19
81. Provide hearth dimensions at each firebox, on floor plans. Hearth thickness to be 2 inches minimum. (3/8 inches thick if fire box is 8 inches high, minimum). 2111.10
82. Provide clearance to combustibles at fireplace opening on the fireplace interior elevations. 2111.11
- EX 4
83. Provide the following notes on the plans:
- a. Factory built fireplaces, chimneys, and all other components shall be listed and installed in accordance with their listing and manufacturer instructions.
  - b. Exterior combustion air ducts shall be listed components of the fireplace, and installed according to the fireplace manufacturer's instructions. 2111.13.1
  - c. Decorative shrouds shall not be installed at the termination of factory built chimneys except where such shrouds are listed and labeled for use with the specific factory built chimney system and are installed in accordance with manufacturer's installation instructions. CMC (802.4.2.4)

#### **MECHANICAL, PLUMBING & ELECTRICAL (NEC 2007) (CMC 2007) (CPC 2007)**

84. Provide additional outlets throughout the first floor living/dining room and second floor sleeping rooms, such that all areas are within 6'0 of an outlet. (A.502 & A.503)
85. Energy compliance design calls for 190,000 BTU water heater. Specify the venting separation requirements for the appliance, considering the high BTU, on the plans. CMC 802.8.3 & 802.8.2  
*Dimension the water heater vent separation from all adjacent openings on the building elevation. (1/A.301)*
86. Identify the water heater installation and venting location on the floor plans. See item #85 above for resolution.
87. Show water heater combustion air, venting, location, and drain line on the plans. CPC 501 & 608.5.
88. If water heater is installed in the garage, provide a 3" ø steel pipe x 36" embedded in concrete slab for protection of water heater in garage. CPC 508.14.
89. Identify the clothes dryer vent path and vent length on the plans. CMC 504.3.2.
90. Provide 3'0 clear to the face of the electric panel from the property line and any adjacent fencing.  
The panel shall be relocated or recessed to provide the clearance. (A.100)  
*Panel is located in a 3'0 side yard, provide an alcove for the panel installation to maintain the required clearance.*
91. Define the proposed electrical panel size on the plans. Electrical panel schedule and circuit drawings are required for service exceeding 400 Amp.
92. Provide the following notes on the plans:
- a. Edison Company approval is required for meter location prior to installation.
  - b. Electrical service to be underground for new construction. NBMC 15.32.015.
  - c. Field inspectors to review and approve underground service requirement prior to concrete placement.
93. Show means of grounding at service entry equipment per CEC 250.52 thru 250-68.

## **STRUCTURAL -- GENERAL**

- 94. ~~Show the SSW holddown anchors on the foundation plan. Holdowns are required for all shear walls with net uplift forces. Use 0.9 DL for earthquake and 0.67 DL for wind for calculation of forces resisting shear wall overturning. (S200)~~
- 95. ~~Identify all shearlines as part of the structural calculations, only the gridlines for the steel posts are shown.~~
- 96. ~~Submit structural design/analysis calculations complying with following minimum presentation requirements:~~
  - a. ~~Number all pages~~
  - b. ~~Include index~~
  - c. ~~Include key plans referenced to calculations for design of gravity and lateral systems.~~
- 97. ~~Write a note on foundation plan "surveyor to file a corner record or record of survey with the office of county surveyor. Evidence of filing shall be submitted to building inspector prior to foundation inspection."~~
- 98. ~~Revise the lateral analysis to account for the double stairs adjacent to the garage. Shear transfer is not provided across the stairs to the second floor and roof diaphragms.~~
- 99. ~~Revise shearwalls V7, V8 and V18 to account for the diaphragm openings created by the adjacent skylights and stairs.~~
- 100. ~~Provide for shear resistance along the Westside of the second floor guestroom wall openings.~~
- 101. ~~Revise the lateral design calculations to utilize  $R=3.5$  in both directions. ASCE 7-05 12.2.3.2~~
- 102. ~~Steel moment frames and wood shearwalls are utilized in combination along several shearlines. Provide stiffness design and detailing for each shear element using the highest R value ( $R=6.5$ ) of the two systems. ASCE 7-05 12.2.4~~

## **SURVEY**

- 103. ~~Show location and description of all corner monuments.~~
- 104. ~~Identify all finish surface materials.~~
- 105. ~~Locate all trees in public right-of-way facing or within 20 feet of the subject property; power poles; utility boxes, etc.~~
- 106. ~~Provide relative elevations at bottom of all site walls. Indicate wall height.~~

## **GRADING**

- 107. ~~Include the removal and recompaction required by the soils report in the CY calculations for the sitework.~~
- 108. ~~Revise the erosion and siltation control plans, to encompass the entire site.~~
- 109. ~~Include the complete soils report conclusions and recommendations on a sheet of the plans.~~
- 110. ~~Show downspout locations and connection to drain line or discharge location.~~
- 111. ~~Identify all deck gutter outlets and downspout locations on the drainage plans. (A.702 & 2of2)~~
- 112. ~~Provide a drainage swale at side yard. Draw a section through swale.~~
- 113. ~~As french drains are not provided as part of the drainage system, provide hydrology calculations and design retention system to retain  $\frac{3}{4}$ " of rain over 24 hr. Design the drainage system to retain concentrated and surface sheet flow water from dry-weather run-off and minor rain events within the site.~~
- 114. ~~Specify the catch basin capacity for the unit detailed on the site drainage plans. Catch basin capacity shall exceed the calculated retention needed by the hydrology calculations.~~
- 115. ~~Omit "or equal" throughout the plans.~~
- 116. ~~Clarify the proposed hard and landscape finishes on the drainage plan.~~

## **DEWATERING SYSTEM**

- 117. ~~Provide plans and Public Works approvals for a site dewatering system. The soils report states groundwater was encountered at a depth of 3.5 to 4 feet below the existing surface. Site prep and foundation excavations exceed the noted depth.~~
- 118. ~~Provide the following information on dewatering drawings:~~
  - a. ~~Well or well point locations.~~
  - b. ~~Pipe system layout (including valve locations).~~
  - c. ~~Primary power source. If a generator is used for primary power supply, write a note on drawings stating maximum noise level from proposed generator not to exceed 50 dba on adjoining property.~~



- d. ~~Back-up power supply (if any).~~
  - e. ~~Location of desanding tank.~~
  - f. ~~Location of property lines and excavation limits.~~
  - g. ~~Depth of wells or well points (reference to sea level or other datum).~~
  - h. ~~Diameter of borehole.~~
  - i. ~~The type of filter media used around wells or well points. Provide sieve analysis graph.~~
  - j. ~~Size of wellscreen openings (slots) and location of screened portion of well or well point.~~
  - k. ~~Soil permeability. Dewatering is required during excavation, soil investigation to include boring(s) to a depth of 20' below bottom of proposed excavation for sieve analysis to determine soils permeability.~~
  - l. ~~Discharge termination point.~~
  - m. ~~Water meter to measure flow.~~
  - n. ~~Anticipated draw-down elevation.~~
  - o. ~~Depth of deepest excavation.~~
  - p. ~~Method of well removal and abandonment.~~
119. ~~If a well point system is used, provide noise calculation using ARI method to verify noise level from pump not to exceed 50 dba at adjacent property.~~
120. ~~Public Works approval is required for discharge into storm drain or public way.~~
121. ~~Provide evidence of approval from State Regional Water Quality Control Board for disposal of ground water.~~